

[Name of Document] Scope of Claim

[Claim 1]

A light emitting device comprising:

5 a light emitting element and a first transistor and a second transistor each for
controlling current to be supplied to the light emitting element, which are formed in a
pixel,

wherein a threshold voltage of the first transistor is higher than a threshold
voltage of the second transistor,

10 wherein a channel length of the first transistor is longer than a channel width
thereof,

wherein a channel length of the second transistor is equal to or shorter than a
channel width thereof,

wherein gate electrodes of the first transistor and the second transistor are
connected to each other,

15 wherein each polarity of the first transistor and the second transistor is p-type,
and

wherein the light emitting element, the first transistor and the second transistor
are all connected in series.

20 [Claim 2]

A light emitting device comprising:

a light emitting element and a first transistor and a second transistor each for
controlling current to be supplied to the light emitting element, which are formed in a
pixel,

wherein a threshold voltage of the first transistor is lower than a threshold voltage of the second transistor,

wherein a channel length of the first transistor is longer than a channel width thereof,

5 wherein a channel length of the second transistor is equal to or shorter than a channel width thereof,

wherein gate electrodes of the first transistor and the second transistor are connected to each other,

wherein each polarity of the first transistor and the second transistor is n-type,

10 and

wherein the light emitting element, the first transistor and the second transistor are all connected in series.

[Claim 3]

15 A light emitting device comprising:

a light emitting element and a first transistor and a second transistor each for controlling current to be supplied to the light emitting element, which are formed in a pixel,

wherein the first transistor is normally-on,

20 wherein the second transistor is normally-off,

wherein a channel length of the first transistor is longer than a channel width thereof,

wherein a channel length of the second transistor is equal to or shorter than a channel width thereof,

wherein gate electrodes of the first transistor and the second transistor are connected to each other,

wherein the first transistor and the second transistor have the same polarity, and

wherein the light emitting element, the first transistor and the second transistor
5 are all connected in series.

[Claim 4]

A light emitting device comprising:

a light emitting element and a first transistor and a second transistor each for
10 controlling current to be supplied to the light emitting element and a third transistor for
controlling input of a video signal, which are formed in a pixel,

wherein the first transistor is normally-on,

wherein the second transistor is normally-off,

wherein a channel length of the first transistor is longer than a channel width
15 thereof,

wherein a channel length of the second transistor is equal to or shorter than a
channel width thereof,

wherein gate electrodes of the first transistor and the second transistor are
connected to each other,

20 wherein the third transistor, the first transistor, and the second transistor are
connected so that a video signal which is inputted by turning ON the third transistor is
given to gate electrodes of the first transistor and the second transistor,

wherein the first transistor and the second transistor have the same polarity, and

wherein the light emitting element, the first transistor and the second transistor

are all connected in series.

[Claim 5]

A light emitting device comprising:

5 a light emitting element and a first transistor and a second transistor each for controlling current to be supplied to the light emitting element and a third transistor for controlling input of a video signal and a fourth transistor for controlling supply of power supply potential, which are formed in a pixel,

wherein the first transistor is normally-on,

10 wherein the second transistor is normally-off,

wherein a channel length of the first transistor is longer than a channel width thereof,

wherein a channel length of the second transistor is equal to or shorter than a channel width thereof,

15 wherein gate electrodes of the first transistor and the second transistor are connected to each other,

wherein the third transistor, the first transistor, and the second transistor are connected so that a video signal which is inputted by turning ON the third transistor is given to gate electrodes of the first transistor and the second transistor,

20 wherein the fourth transistor, the first transistor, and the second transistor are connected so that the power supply potential is given to gate electrodes of the first transistor and the second transistor by turning ON the fourth transistor,

wherein the power supply potential is given to a source of one of the first transistor and the second transistor,

wherein the first transistor and the second electrode have the same polarity, and
wherein the light emitting element, the first transistor and the second transistor
are all connected in series.

5 [Claim 6]

The light emitting device according any one of Claims 1 to 5,
wherein a ratio of the channel length to the channel width of the first transistor
is equal to or more than 5.

10 [Claim 7]

A device substrate comprising:
a pixel electrode and a first transistor and a second transistor each for
controlling current to be supplied to the pixel electrode, which are formed in a pixel,
wherein a threshold voltage of the first transistor is higher than a threshold of
15 the second transistor,
wherein a channel length of the first transistor is longer than a channel width
thereof,
wherein a channel length of the second transistor is equal to or shorter than a
channel width of the second transistor,
20 wherein gate electrodes of the first transistor and the second transistor are
connected to each other,
wherein each polarity of the first transistor and the second transistor is p-type,
and
wherein the pixel electrode, the first transistor and the second transistor are all

connected in series.

[Claim 8]

A device substrate comprising:

5 a pixel electrode and a first transistor and a second transistor each for controlling current to be supplied to the pixel electrode, which are formed in a pixel,

wherein a threshold voltage of the first transistor is lower than a threshold of the second transistor,

10 wherein a channel length of the first transistor is longer than a channel width thereof,

wherein a channel length of the second transistor is equal to or shorter than a channel width thereof,

wherein gate electrodes of the first transistor and the second transistor are connected to each other,

15 wherein each polarity of the first transistor and the second transistor is n-type, and

wherein the pixel electrode, the first transistor and the second transistor are all connected in series.

20 [Claim 9]

A device substrate comprising:

a pixel electrode and a first transistor and a second transistor each for controlling current to be supplied to the pixel electrode, which are formed in a pixel,

wherein the first transistor is normally-on,

wherein the second transistor is normally-off,
wherein a channel length of the first transistor is longer than a channel width thereof,
wherein a channel length of the second transistor is equal to or shorter than a
5 channel width thereof,
wherein gate electrodes of the first transistor and the second transistor are connected to each other,
wherein the first transistor and the second transistor have the same polarity, and
wherein the pixel electrode, the first transistor and the second transistor are all
10 connected in series.

[Claim 10]

The device substrate according to any one of Claims 7 to 9,
wherein a ratio of the channel length to the channel width of the first transistor
15 is equal to or more than 5.

[Claim 11]

A method for driving a light emitting device, comprising the step of:
controlling current to be supplied to a light emitting element by a first transistor
20 and a second transistor,
wherein a threshold of the first transistor is higher than a threshold of the second transistor,
wherein a channel length of the first transistor is longer than a channel width thereof,

wherein a channel length of the second transistor is equal to or shorter than a channel width thereof,

wherein gate electrodes of the first transistor and the second transistor are connected to each other,

5 wherein each polarity of the first transistor and the second transistor is p-type,

wherein the light emitting element, the first transistor and the second transistor are all connected in series, and

wherein the first transistor operates in a saturated region, and the second transistor operates in a linear region.

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[Claim 12]

A method for driving a light emitting device, comprising the step of:

controlling current to be supplied to a light emitting element by a first transistor and a second transistor,

15 wherein a threshold of the first transistor is lower than a threshold of the second transistor,

wherein a channel length of the first transistor is longer than a channel width thereof,

20 wherein a channel length of the second transistor is equal to or shorter than a channel width thereof,

wherein gate electrodes of the first transistor and the second transistor are connected to each other,

wherein each polarity of the first transistor and the second transistor is n-type,

wherein the light emitting element, the first transistor and the second transistor

are all connected in series, and

wherein the first transistor operates in a saturated region, and the second transistor operates in a linear region.

5 [Claim 13]

A method for driving a light emitting device, comprising the step of:

controlling current to be supplied to a light emitting element by a first transistor and a second transistor,

wherein the first transistor is normally-on,

10 the second transistor is normally-off;

wherein a channel length of the first transistor is longer than a channel width thereof,

wherein a channel length of the second transistor is equal to or shorter than a channel width thereof,

15 wherein gate electrodes of the first transistor and the second transistor are connected to each other,

wherein the first transistor and the second transistor have the same polarity,

wherein the light emitting element, the first transistor and the second transistor are all connected in series, and

20 wherein the first transistor operates in a saturated region, and the second transistor operates in a linear region.

[Claim 14]

The method for driving the light emitting device according to any one of

Claims 11 to 13,

wherein a ratio of the channel length to the channel width of the first transistor is equal to or more than 5.

5 [Claim 15]

A display device having the light emitting device according to any one of Claims 1 to 5.

[Claim 16]

10 A digital still camera having the light emitting device according to any one of Claims 1 to 5.

[Claim 17]

15 A digital still camera having the light emitting device according to any one of Claims 1 to 5.

[Claim 18]

A laptop computer having the light emitting device according to any one of Claims 1 to 5.

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[Claim 19]

A mobile computer according to any one of Claims 1 to 5,
wherein the light emitting device is provided.

[Claim 20]

An image reproducing device having the light emitting device according to any one of Claim 1 to 5.

5 [Claim 21]

A goggle type display having the light emitting device according to any one of Claims 1 to 5.

[Claim 22]

10 A video camera having the light emitting device according to any one of Claims 1 to 5.